

Claims:

1.

An apparatus for delivering fuel and air to an engine, comprising:

a carburetor having a body, an air intake passage formed in the body through which a fuel and air mixture is delivered to the engine, and a throttle valve carried by the body for movement between idle and wide open positions to control fluid flow through the air intake passage; and

a passage member carried by the carburetor body and having at least one air passage through which air is delivered to the engine, and at least one air control valve carried by the passage member for movement between first and second positions to control the flow of air through said at least one air passage, the air control valve being operably connected to the throttle valve so that said at least one air control valve is moved between its first and second positions in response to at least a portion of the movement of the throttle valve between its idle and wide open positions.

2.

The apparatus of claim 1 wherein the air control valve and the throttle valve are operably connected together by a link that provides a lost motion coupling permitting limited movement of throttle valve relative to the air control valve.

3.

The apparatus of claim 2 wherein the link permits the throttle valve to rotate a predetermined amount away from its idle position without causing movement of the air control valve.

4.

The apparatus of claim 2 which also comprises a throttle valve lever connected to the throttle valve and an air valve lever connected to the air control valve, the link being operably connected to the throttle valve lever at one end and to the air valve lever at its other end, and wherein one of the throttle valve lever and air valve lever include a slot in which a portion of the link is slidably received to provide the lost motion coupling.

5.

The apparatus of claim 1 which also comprises a plate carried by the carburetor body, and wherein the passage member is connected to the plate.

6.

The apparatus of claim 5 wherein the plate and passage member are integrally formed.

7.

The apparatus of claim 1 wherein a plurality of air passages are provided in the passage member, and a separate air control valve is associated with each air passage, each air control valve being responsive to at least a portion of the movement of the throttle valve between its idle and wide open positions.

8.

The apparatus of claim 7 which also comprises a shaft on which the air control valves are mounted so that the air control valves move in unison.

9.

The apparatus of claim 8 which also comprises an air valve lever carried by the shaft, a throttle valve lever carried by the throttle valve and a link coupling together the air valve lever and throttle valve lever.

10.

The apparatus of claim 9 wherein one of the air valve lever and the throttle valve lever include a slot, and the link is slidably connected to said one of the air valve lever and the throttle valve lever through the slot providing a lost motion coupling between the air valve lever and throttle valve lever.

11.

The apparatus of claim 5 wherein the plate is a pump cover plate defining at least part of a fuel pump of the carburetor.

12.

The apparatus of claim 4 wherein the throttle valve lever includes a plurality of holes each providing a separate location for connection of the link to the throttle valve lever.